MMWR™
Morbidity and Mortality Weekly Report
Weekly January 11, 2002 / Vol. 51 / No. 1

Rapid Assessment of Injuries Among Survivors of the Terrorist Attack on the World Trade Center — New York City, September 2001

On September 11, 2001, a jet aircraft crashed into the north tower of the World Trade Center (WTC) in lower Manhattan. Minutes later, a second aircraft crashed into the south tower. The impact, fires, and subsequent collapse of the buildings resulted in the deaths of thousands of persons. The precise number and causes of deaths could not be assessed in the immediate aftermath of the attack; however, data were available on the frequency and type of injuries among survivors (Figure 1). In previous disasters, such information assisted in characterizing type and severity of injuries and the health-care services needed by survivors (*1*). To assess injuries and use of health-care services by survivors, the New York City Department of Health (NYCDOH) conducted a field investigation to review emergency department (ED) and inpatient medical records at the four hospitals closest to the crash site and a fifth hospital that served as a burn referral center. This report summarizes findings of that assessment, which indicated that the arrival of injured persons to this sample of hospitals began within minutes of the attack and peaked 2 to 3 hours later. Among 790 injured survivors treated within 48 hours, approximately 50% received care within 7 hours of the attack, most for inhalation or ocular injuries; 18% were hospitalized. Comprehensive surveillance of disaster-related health effects is an integral part of effective disaster planning and response.

Within 6 hours of the WTC attack, a NYCDOH rapid assessment team began collecting demographic and clinical data on all persons who sought emergency care from 8 a.m. September 11 to 8 a.m. September 13 at the five Manhattan hospitals. Information about each person included sex, age, mode of arrival at the hospital, date and time of registration or initial assessment, type and anatomic location of injury or illness, whether the injury or illness was attributable to the attack, and whether the person was admitted for additional treatment or was discharged from the ED. Among the 1,688

FIGURE 1. A survivor of the World Trade Center attack. Most survivors treated at sampled hospitals had inhalation and ocular injuries.

AP (Associated Press) photo/Amy Sancetta

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The *MMWR* series of publications is published by the Epidemiology Program Office, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

SUGGESTED CITATION
Centers for Disease Control and Prevention. [Article Title]. MMWR 2002;51:[inclusive page numbers].

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ED patients who received care at the sampled hospitals during the assessment period, 1,103 (65%) were survivors treated for injuries or illnesses related to the attack. A link between injury or illness and the attack was not established for 96 (6%) patients because of incomplete documentation; specific injury or illness was missing for 161 (15%), and admission and discharge data were not documented for 108 (10%). The median age of 1,103 survivors was 39 years (range: <1–95 years), 729 (66%) were male, 282 (26%) arrived by emergency medical vehicle, and 320 (29%) were rescue workers (e.g., firefighters, police officers, and emergency medical services personnel). A total of 810 (73%) were treated and released from EDs, 181 (16%) were hospitalized for additional treatment, and four (0.4%) died during emergency care. Among the survivors, 152 (14%) had WTC-related noninjury conditions (e.g., cardiac, respiratory, neurologic, or psychiatric illness).

Within 12 hours of the first crash, emergency care was sought by 511 (71%) of the 723 survivors with recorded injuries and time of assessment (Figure 2). The survivors with injuries requiring admission and additional treatment presented earlier than those treated and released. Approximately 50% of the survivors admitted for treatment presented within 4 hours of the event (interquartile range: 2.4–8.9 hours). In comparison, approximately 50% of the survivors treated and released from the ED presented within 7.6 hours (interquartile range: 3.5–15.3 hours). Rescue workers arrived later than other survivors and accounted for 59 (51%) of 115 survivors presenting to the EDs during the first 24–48 hours after the attack (Figure 2).

Among 790 survivors with injuries, 386 (49%) had inhalation injuries and 204 (26%) had ocular injuries (Table 1). Most inhalation and ocular injuries were attributed to smoke, dust, debris, or fumes. A total of 443 (56%) survivors were treated for inhalation injury, ocular injury, or a combination of both without additional injuries. Among survivors hospitalized with injuries, 52 (37%) sustained inhalation injuries and 27 (19%) sustained burns. Most survivors with fractures (59%), burns (69%), closed head injuries (57%), or crush injuries (75%) were hospitalized for additional treatment. The injury pattern among rescue workers differed from the pattern among other survivors (Table 2). A significantly higher percentage of rescue workers sustained ocular injuries (39% versus 19%; $p<0.0001$), and a significantly lower percentage of rescue workers sustained burns (2% versus 6%; $p<0.01$).

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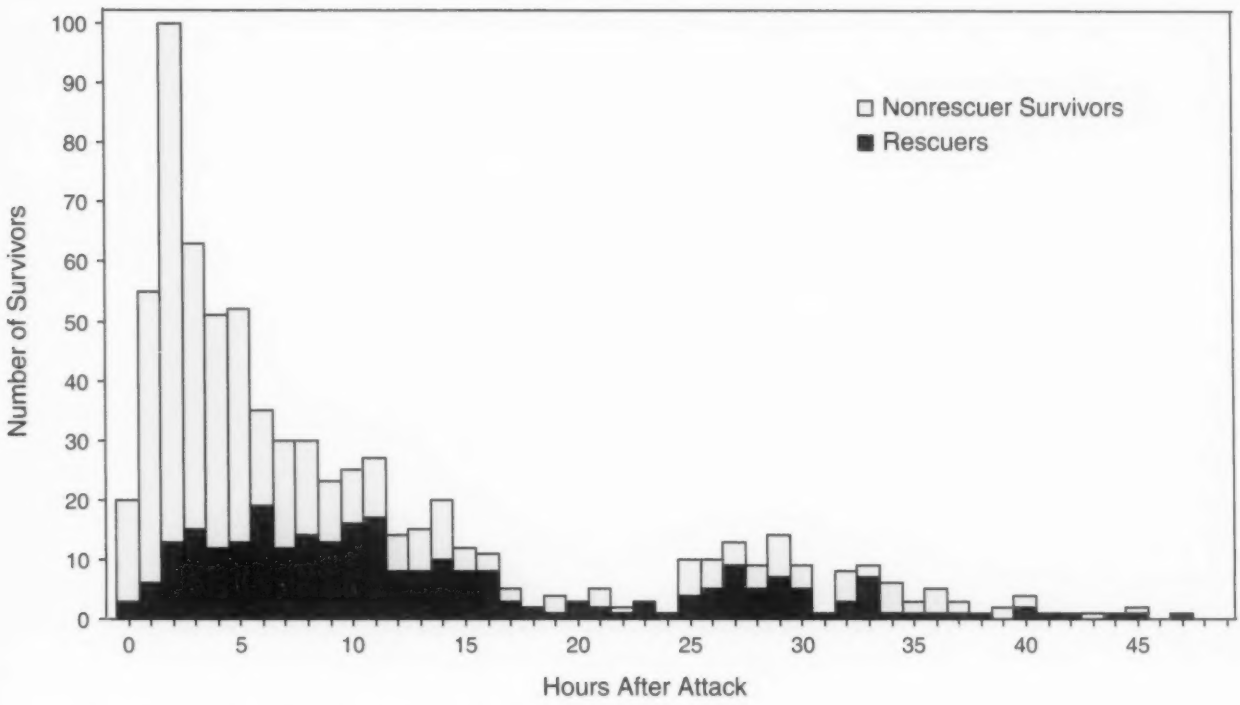
FIGURE 2. Number of World Trade Center attack survivors with injuries reported by five hospitals*, by number of hours from initial attack to medical assessment — New York City, from 8 a.m. September 11 to 8 a.m. September 13, 2001



*N=723. Time of assessment data missing for 67 (8%) of the survivors with injuries.

TABLE 1. Number and percentage of injuries reported by five hospitals after attack on World Trade Center, by injury — New York City, from 8 a.m. September 11 to 8 a.m. September 13, 2001*

Injury	Hospitalized (n=139)† No.§	Hospitalized (n=139)† (%)¶	Treated and released (n=606) No.	Treated and released (n=606) (%)	Undocumented follow-up care (n=45) No.	Undocumented follow-up care (n=45) (%)	Total (n=790) No.	Total (n=790) (%)
Inhalation	52	(37)	300	(50)	34	(76)	**386**	**(49)**
Ocular	10	(7)	185	(31)	9	(20)	**204**	**(26)**
Laceration	25	(18)	80	(13)	5	(11)	**110**	**(14)**
Sprain or strain	17	(12)	85	(14)	6	(13)	**108**	**(14)**
Contusion	29	(21)	66	(11)	3	(7)	**98**	**(12)**
Fracture	27	(19)	19	(3)	0	(0)	**46**	**(6)**
Burn	27	(19)	12	(2)	0	(0)	**39**	**(5)**
Closed head	8	(6)	6	(1)	0	(0)	**14**	**(2)**
Crush	6	(4)	2	(0.3)	0	(0)	**8**	**(1)**

*Excludes unspecified injuries or illnesses.
†Includes two survivors who died during emergency care.
§Totals might exceed total number of survivors because some survivors might have sustained multiple injuries.
¶Totals might exceed 100% because some survivors might have sustained multiple injuries.

TABLE 2. Number and percentage of injuries to rescue workers and nonrescue survivors reported by five hospitals after attack on World Trade Center, by injury — New York City, from 8 a.m. September 11 to 8 a.m. September 13, 2001*

Injury	Rescue workers (n=279) No.†	(%)§	Nonrescuer survivors (n=511) No.	(%)	Total (n=790) No.	(%)
Inhalation	118	(42)	268	(52)	**387**	**(49)**
Ocular	108	(39)	96	(19)	**204**	**(26)**
Sprain or strain	44	(16)	64	(13)	**110**	**(14)**
Laceration	23	(8)	87	(17)	**110**	**(14)**
Contusion	44	(16)	54	(11)	**98**	**(12)**
Fracture	13	(5)	33	(6)	**46**	**(6)**
Burn	6	(2)	33	(6)	**39**	**(5)**
Closed head	3	(1)	11	(2)	**14**	**(2)**
Crush	3	(1)	5	(1)	**8**	**(1)**

*Excludes unspecified injuries or illnesses.
†Totals might exceed number of survivors because some survivors might have sustained multiple injuries.
§Totals might exceed 100% because some survivors might have sustained multiple injuries.

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Editorial Note: Similar to injured survivors of other terrorist attacks on buildings, most survivors of the WTC incident sustained injuries that were treated on an outpatient basis (*2,3*). The hospital admission rate among survivors of the Murrah Federal building bombing in Oklahoma City, Oklahoma, was approximately 20% (*2*). However, admission rates associated with terrorist bombings should be compared with caution because the number at risk, the location of survivors at the time of the attack, and building and blast effects vary with each event. Inhalation and ocular injuries were diagnosed and treated more frequently following the WTC attack than the attacks in Oklahoma City and on the U.S. Marine barracks in Beirut, Lebanon (*2,4*). This difference might be the result of more extensive exposure to smoke and respirable dust after the WTC attack.

Multicasualty disaster reports commonly describe a first wave of survivors with minor injuries, a second wave of more severely injured survivors, and subsequent waves of survivors rescued during extrication from the disaster site (*5*). This report describes one large wave of survivors and a second wave the next day largely comprising rescue workers. Few survivors were extricated from the WTC site, probably because of the limited number of survivable spaces left by the overwhelming forces of the collapse of the 110-story towers (*2,6*).

The initial wave of rescue-worker injuries occurred while responding to the collapse of the upper floors the of the towers. Rescue workers who sought medical care at EDs the following day sustained injuries associated with fires, unstable rubble, sharp-edged building fragments, and exposure to smoke and respirable dust at the attack site. As part of rescue and recovery operations during the rapid assessment period, local, state, and federal agencies distributed protective eye, hand, foot, and respiratory gear and training on correct use. CDC distributed information on these topics through NYCDOH, including information on eye safety (http://www.cdc.gov/niosh/eyesafe.html), respiratory exposures (http://www.cdc.gov/niosh/erfaqs.html), general rescue site safety (http://www.cdc.gov/niosh/emhaz2.html), and respirator cleaning and reuse (http://www.cdc.gov/niosh/respcln.html).

The findings in this report are subject to at least two limitations. First, the rapid assessment of the health effects of the WTC attack was a sample that did not encompass all injured survivors who sought emergency medical care near the crash site and did not provide population-based estimates of injury occurrence (*1,2*). Second, data describing injury circumstances, clinical conditions, treatments, and follow-up care were missing from many survivor records reviewed by the rapid assessment team. Some survivors were treated and released from temporary triage stations outside hospitals without documentation. Numerous survivors were treated by more distant hospitals in New York, New Jersey, and Connecticut, by private physicians, onsite triage stations, or they treated themselves.

The rapid assessment of injuries among WTC attack survivors reinforces the need to strengthen capacity for postdisaster surveillance before disasters occur (*7,8*). Use of electronic data can improve timeliness of surveillance, and in October 2001, NYCDOH began an automated electronic surveillance system to monitor chief complaints reported in 29 area EDs. Standardized patient record keeping can improve completeness of point-of-care data collection and public health reporting. In North Carolina and Oregon, CDC pilot projects are using Data Elements for Emergency Department Systems (DEEDS), a set of recommended specifications for ED patient record systems (*9*). Improving ED record keeping and reporting systems will assist in the surveillance of disaster-related health effects and are an integral part of effective disaster planning and response (*10*).

References

1. Noji EK. The public health consequences of disasters. Prehospital and Disaster Medicine 2000;15:147–57.
2. Hogan DE, Waeckerle JF, Dire DJ, Lillibridge SR. Emergency department impact of the Oklahoma City terrorist bombing. Ann Emerg Med 1999;34:160–7.
3. Frykberg ER, Tepas JJ. Terrorist bombings: lessons learned from Belfast to Beirut. Ann Surg 1988;208:569–76.
4. Frykberg ER, Tepas JJ, Alexander RH. The 1983 Beirut airport terrorist bombing: injury patterns and implications for disaster management. Am Surg 1989;55:134–41.
5. Orr SM, Robinson WA. The Hyatt Regency skywalk collapse: an EMS-based disaster response. Ann Emerg Med 1983;12:601–5.

6. Noji EK. Earthquakes. In Noji EK, ed. The public health consequences of disasters. New York, New York: Oxford University Press; 1997: 63–78.
7. Miyamoto M, Sako M, Kimura M, et al. Great earthquakes and medical information systems, with special reference to telecommunications. J Am Med Inform Assoc 1999;6:252–8.
8. Lillibridge SR, Noji EK, Burkle FM. Disaster assessment: the emergency health evaluation of a population affected by a disaster. Ann of Emerg Med 1993;22:1715–20.
9. DEEDS Writing Committee. Data elements for emergency department systems, release 1.0 (DEEDS): a summary report. Ann Emerg Med 1998;31:264–73.
10. Wetterhall SF, Noji EK. Surveillance and epidemiology. In: Noji EK, ed. The public health consequences of disasters. New York, New York: Oxford University Press; 1997:37–64.

Nutritional Assessment of Children After Severe Winter Weather — Mongolia, June 2001

During 1999–2001, Mongolia (2000 population: 2.7 million) experienced consecutive dzuds (i.e., a severe winter with extreme cold and heavy snowfall that causes mass debilitation and death of livestock and jeopardizes the lives of herders who depend on their animals for food, fuel, income, and transportation) that resulted in a loss of nearly six million of the country's 33 million livestock (*1,2*). As a result, severe psychological stress and increased school drop-out rates have been reported, and increased migration of rural herders into urban centers has placed a burden on water, sanitation, medical, and social services. This disaster threatened the health and food security of approximately 40% of the country's population (*2*). The Mongolian Ministry of Health asked the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) for assistance in assessing the nutritional effects of the 2000–2001 dzud on children aged 6–59 months. This report summarizes the results of that assessment, which indicated that affected districts had no excess nutritional wasting in any age group; however, excess growth stunting and anemia were common in both affected and unaffected districts. Expanded monitoring of this population is needed to determine the causes of malnutrition and to develop appropriate interventions.

The Mongolian government classified districts as severely, moderately, slightly, or not affected by the 2000–2001 dzud based on reported livestock deaths in each district. In June 2001, 474 children aged 6–59 months were randomly selected from the 73 severely affected districts; a comparison group of 463 children of similar age were randomly selected from the 184 districts slightly or not affected (i.e., unaffected). A three-stage cluster sample design was used to identify districts, subdistricts, and children (selected from local civil and medical registration lists) for inclusion in the samples. The 45 districts designated as moderately affected and the capital city of Ulaan Bataar were not included in the survey.

Informed verbal consent to participate was obtained from a parent or caretaker of each selected child. An adult household member was asked about livestock deaths since December 2000 and number of livestock that remained. Each child was assessed by anthropometry (height or length and weight), hemoglobin measurement, and a targeted physical examination. Height or length was measured to the nearest 1 mm using a standard height board, and weight was measured to the nearest 100 g using a digital bathroom scale (Figure 1). Wasting (low weight for height), stunting (low height for age) and underweight (low weight for age) were defined as a z-score >2.0 standard deviations below the median of the international National Center for Health Statistics/WHO reference population (*3*). In this reference population, 2.3% of children have a z-score below -2.0. Capillary blood was

FIGURE 1. As part of nutritional assessment, a child's weight is measured on a standard bathroom scale — Mongolia, 2001

Photo/Janet Bates

obtained by fingerstick from all selected children, their mothers, and a subsample of male household members aged 18–59 years and tested using Hemocue hemoglobinometers in the field. At an altitude of ≤1,000 m, anemia was defined as hemoglobin <11.0 g/dL for children, <12.0 g/dL for nonpregnant mothers (n=837), and <13.0 g/dL for men (n=176), with cut-offs for higher altitudes adjusted according to WHO recommendations (*4*).

Children were excluded from analysis whose height or weight measurements were missing or whose z-scores were outside the plausible ranges suggested by WHO (n=35) (*3*) or whose hemoglobin values were missing (n=3). The final cohort consisted of 454 children in the dzud-affected sample and 445 children in the unaffected sample. Data were analyzed using EpiInfo version 6.04 and SUDAAN version 7.5.

Mongolian livestock consists primarily of cows, horses, sheep, goats, and camels. Livestock losses were higher in the affected districts, in which the median proportion of all animals lost as reported by households was 32.1% (range: 0–100%); in unaffected districts, the median loss was 7.4% (range: 0–100%).

No significant differences were found in the age and sex distributions of children and in the prevalence of wasting, stunting, or underweight between children in the affected and unaffected samples (Table 1). The prevalence of wasting in both samples was below the 2.3% level in the reference population. In contrast, approximately one third of children had evidence of growth stunting in both the affected and unaffected samples. Among children aged 6–23 months, the prevalence of stunting was higher in the affected districts than in the unaffected districts (p=0.07). The overall distributions of height-for-age scores were substantially lower in both samples than in the reference population (Figure 2).

No differences were found between the affected and unaffected samples in the prevalence of anemia among children, mothers, or men. Approximately half of the children aged 6–23 months were anemic (46% [95% confidence interval (CI)= 38.0%–55.1%] and 52.5% [95% CI=43.7%–60.7%]) in the dzud-affected and unaffected districts, respectively. The prevalence of anemia was lower among children aged >2 years (16.2% [95% CI=10.3%–22.1%] and 12.6% [95% CI=12.6%–24.7%]) in affected and unaffected districts, respectively. Anemia was common among nonpregnant mothers (16.6% [95% CI=11.1%–22.1%] and 17.3% [95% CI=12.2%–22.5%]) and rare among men (2.3% [95% CI=0.2%–4.4%] and 2.5% [95% CI=0.3%–5.5%]) in affected and unaffected districts, respectively.

FIGURE 2. Percentage of growth stunting among children aged 6–59 months in dzud-affected and unaffected districts — Mongolia, June 2001

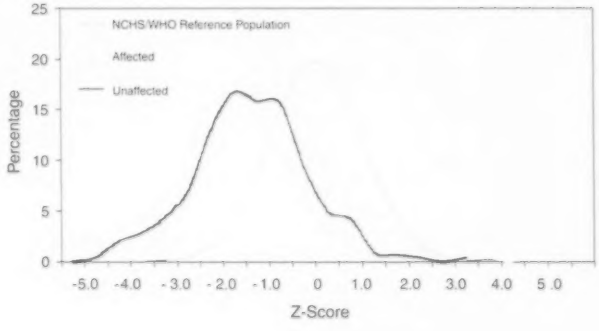

TABLE 1. Estimated prevalence of wasting, stunting, and underweight among children aged 6–59 months in dzud-affected* and unaffected districts — Mongolia, 2001

		Wasting				Stunting				Underweight			
Condition	No.	%†	(95% CI§)	Mean WHZ¶	(95% CI)	%†	(95% CI)	Mean HAZ¶	(95% CI)	%†	(95% CI)	Mean WAZ¶	(95% CI)
AFFECTED													
Age (mos)													
6–23	176	2.3	(-0.3–4.9)	-0.02	(-0.14–0.10)	38.1	(29.9–46.2)	-1.54	(-1.76– -1.32)	13.1	(8.2–17.9)	-1.02	(-1.18– -0.86)
24–59	278	0	(—)	0.08	(-0.02–0.18)	34.2	(28.6–39.7)	-1.58	(-1.47– -1.42)	14.4	(10.3–18.5)	-0.92	(-1.04– -0.80)
Total	**454**	**0.9**	**(-0.1–1.9)**	**0.04**	**(-0.04–0.12)**	**35.7**	**(30.7–40.7)**	**-1.56**	**(-1.70– -1.42)**	**13.9**	**(10.4–17.4)**	**-0.96**	**(-1.06– -0.86)**
UNAFFECTED													
Age (mos)													
6–23	182	1.1	(-0.4–2.6)	0.18	(0.06–0.30)	26.9	(18.2–35.6)	-1.32	(-1.61– -1.03)	12.6	(7.8–17.5)	-0.73	(-0.93– -0.53)
24–59	263	0.8	(-0.3–2.0)	0.07	(0.03–0.17)	32.7	(26.6–38.9)	-1.50	(-1.68– -1.32)	12.6	(8.4–16.7)	-0.88	(-1.02– -0.74)
Total	**445**	**0.9**	**(-0.2–2.0)**	**0.12**	**(0.04–0.20)**	**30.3**	**(24.8–35.8)**	**-1.42**	**(-1.60– -1.24)**	**12.6**	**(9.1–16.1)**	**-0.82**	**(-0.94– -0.70)**

* A severe winter with extreme cold and heavy snowfall that causes mass debilitation and death of livestock and jeopardizes the lives of herders who depend on animals for food, fuel, income, and transportation.
† Weight-for-height, height-for-age, and weight-for-age z-scores <-2.0.
§ Confidence interval.
¶ WHZ=weight-for-height z-scores; HAZ=height-for-age z-scores; WAZ=weight-for-age z-scores.

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Editorial Note: The findings in this report indicate a high prevalence of growth stunting, which is indicative of chronic malnutrition, but no evidence of excess wasting, which is indicative of acute malnutrition. The prevalence of stunting among younger children might have been somewhat greater in affected than in unaffected districts because children aged <24 months grow more rapidly than older children; therefore, growth faltering associated with a nutritional deficit might be noticeable earlier.

The prevalence of anemia in both samples was high among the youngest children, moderate among nonpregnant women, and very low among men, suggesting iron deficiency associated with poor iron intake as the underlying cause of anemia (*5*). Approximately half of the children aged 6–23 months in both the affected and unaffected samples had anemia; this level indicates the need for universal iron supplementation in this age group (*6*). Mutton and other red meats are sources of highly bioavailable iron and are among the staples of the Mongolian diet, but quantity of consumption among the youngest children might be insufficient to meet iron requirements.

This assessment might have underestimated the nutritional effects of the 2000–2001 dzud on children for at least five reasons. First, the classification of dzud severity status was developed by the Mongolian government to assess the economic impact of the dzud and may have been too imprecise to allow detection of differences in health status. Second, relief efforts to distribute food to affected areas might have lessened the nutritional impact of livestock losses among herders and their families. Third, only the 2000–2001 dzud was assessed; families affected by both dzuds could be at greater risk than families affected by only one. Fourth, because herders store food in the fall for the following winter and spring, the effects of the 2000–2001 dzud might not have been felt immediately. A family that had adequate food stocks for this past winter and spring might be unable to replace food stocks for the following winter. Finally, as a result of the dzud disaster, thousands of herders who lost all or nearly all their animals migrated to urban centers in search of work and food. The children of these herders might be at extreme nutritional risk but would not have been represented if they were not yet registered with local civil or medical authorities at the time of the survey or if they had relocated to Ulaan Bataar.

Additional assessment and interventions are needed to improve nutritional deficiencies among children in Mongolia. Recommendations include the nutritional assessment of the recent migrant population not represented in this survey and additional support for growth promotion programs already being developed, especially among the youngest children in severely dzud-affected districts, for early identification, and intervention for children who show growth faltering. Additional strategies include universal supplementation of iron among children aged <2 years and more broad-based population interventions to fortify staple foods with iron.

References

1. Borgilmaa Z. Government raises specter of a third consecutive dzud disaster. Available at http://www.mongoliathisweek.mn. Accessed January 2002.
2. United Nations Office for the Coordination of Humanitarian Affairs. Mongolia winter disaster dzud: United Nations and government of Mongolia appeal for international assistance. Geneva, Switzerland: United Nations Office for the Coordination of Humanitarian Affairs. January 2001. Available at http://www.reliefweb.int/appeals/2001/mng01.pdf. Accessed January 2002.
3. World Health Organization. Physical status: the use and interpretation of anthropometry. Report of a WHO Expert Committee. World Health Organ Tech Rep Ser 1995;854:1–452.
4. World Health Organization. Iron deficiency: indicators for assessment and strategies for prevention. Geneva, Switzerland: World Health Organization, 1997 (publication no. WHO/NUT/96.12).
5. Yip R. Iron deficiency: contemporary scientific issues and international programmatic approaches. J Nutr 1994;124:1479S–90S.
6. Stoltzfus R, Dreyfuss M. Guidelines for the use of iron supplements to prevent and treat iron deficiency anemia. Washington, DC: International Nutritional Anemia Consultative Group, World Health Organization/United Nations Children's Fund, 1998.

Outbreak of *Salmonella* serotype Kottbus Infections Associated with Eating Alfalfa Sprouts — Arizona, California, Colorado, and New Mexico, February–April 2001

On March 12, 2001, the California Department of Health Services (CDHS) identified a cluster of *Salmonella* Kottbus isolates with indistinguishable pulsed-field gel electrophoresis (PFGE) patterns. During February 1–May 1, CDHS identified 23 patients with *S.* Kottbus infections in several California counties and an additional patient from Arizona. This

report summarizes the results of the investigation of this outbreak, which identified cases in four states and implicated alfalfa sprouts produced at a single facility.

The median age of case-patients was 36 years (range: 9–72 years); 16 patients (67%) were female. Twenty-one patients developed an acute diarrheal illness, and three patients had urinary tract infections. Three patients were hospitalized.

Using a standardized questionnaire, a matched case-control study was conducted. A case was defined as culture-confirmed *S.* Kottbus infection with onset after January 2001 in a California resident with an isolate having the outbreak PFGE pattern. The first 10 reported California patients were matched with two controls by age group, sex, and city prefix code. Fifteen (63%) of 23 patients ate alfalfa sprouts during the week before becoming ill. A significant association was found between eating alfalfa sprouts and illness (matched odds ratio: 5.5; 95% confidence interval=1.2–26.1). No other food or restaurant exposure was significantly associated with illness. Following the case-control study, 32 patients infected with the outbreak strain of *S.* Kottbus were identified in California (24), Arizona (six), Colorado (one), and New Mexico (one).

A traceback investigation identified a single sprout producer as the source of the contaminated sprouts. Review of the sprouter's production records indicated that a single seed lot was temporally associated with the dates of illness onset. A culture of a sample of this seed lot yielded *S.* Kottbus. These seeds were imported from Australia in November 2000, but no further information about the distribution of this seed lot was available. Cultures from two floor drains in the production facility also yielded *S.* Kottbus. Patient, seed, and environmental isolates all had indistinguishable PFGE patterns.

Although the implicated seed lot was last used on March 29, the sprouter issued a voluntary recall of all sprout products on April 17, and ceased all sprout production pending further internal review of their production processes. Review of decontamination and distribution records indicated that at least some seeds underwent heat treatment followed by a 2,000-ppm sodium hypochlorite treatment for 15 minutes. The U.S. Food and Drug Administration (FDA) recommends decontamination of seeds with one or more treatments (e.g., soaking in a 20,000-ppm calcium hypochlorite for 15 minutes) that have been approved for reduction of pathogens in seeds (*1,2*). The effectiveness of alternative seed decontamination has not been established. The sprout producers subsequently agreed to use only the FDA-recommended 20,000-ppm soak when sprout production resumed.

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Editorial Note: *S.* Kottbus is a rarely reported cause of salmonellosis in the United States. During 1968–1998, a median of 42 *S.* Kottbus isolates were reported each year to CDC through the Public Health Laboratory Information System (*3*). This was the second outbreak of *S.* Kottbus since 1985 and the first outbreak associated with sprouts.

Since 1995, 15 outbreaks of *Salmonella* spp. and two outbreaks of *Escherichia coli* O157:H7 infections associated with sprouts have been reported to CDC. Despite public health advisories about the risks for eating raw sprouts, persons at high risk for systemic infection continue to eat sprouts (*4*). Two of the patients in this outbreak were immunocompromised, and one was a young child. In each case, persons perceived raw sprouts as a "healthy" food item.

Sprouts may be contaminated during seed production, germination, sprout processing, or consumer handling and preparation (*5,6*). On the farm, sprouts seeds may become contaminated through the use of untreated agricultural water, improperly composted manure as fertilizer, excretion from domestic or wild animals, runoff from domesticated animal production facilities, or improperly cleaned harvesting or processing machines (*5,6*). The association of specific seed lots with illness suggests that seeds are the most likely source for this and most other sprout-related outbreaks (*4*). Conditions suitable for seed sprouting also are ideal for increasing pathogenic bacterial counts by several logs.

The use of a 20,000-ppm calcium hypochlorite soak before sprouting might reduce the risk for sprout-related illness (*4*). However, use of this high-dose soak is not completely effective, and outbreaks continue to occur (*7*). Cracks and crevasses in the sprout seed may trap pathogenic bacteria, making them inaccessible to lethal concentrations of disinfectants (*5*). Because >20,000-ppm calcium hypochlorite soaks can impair seed germination (*5*), alternative methods are needed to reduce the risk for human disease following sprout consumption. In this outbreak, some of the implicated sprouts were from seeds that had undergone a combination of heat treatment and a 15-minute, low-dose calcium hypochlorite soak (2,000 ppm). The subsequent outbreak suggests that this hybrid technique using a heat treatment combined with a low-dose hypochlorite solution might not reduce adequately

pathogenic bacterial colony counts in alfalfa seeds. Reducing pathogenic bacterial counts on seed during production and harvest could improve the effectiveness of postharvest decontamination.

Public education efforts about the risks for eating uncooked sprouts need to be continued, particularly among vulnerable populations (i.e., the elderly, young children, and immunocompromised persons). CDC and FDA recommend that persons at high risk for systemic infections not eat raw sprouts. For persons who continue to eat sprouts, FDA recommends cooking before eating to reduce the risk for illness (*8*).

In response to this outbreak, CDHS and the California Department of Education recommend that schools stop serving uncooked sprouts to young children. Public health officials should promote awareness of the role of raw sprout consumption in foodborne disease and consider package labeling as a method for improving consumer awareness. In addition, designation of sprout seed production for human consumption at seed planting could further reduce the risk for sprout-associated outbreaks (*5*). If sprout seed producers knew which sprout seed crops were dedicated for human consumption before harvest, producers could focus on reducing potential contamination in the field. Avoiding seed contamination in the field might reduce the risk for consumer exposure to foodborne pathogens.

References

1. U.S. Food and Drug Administration. Guidance for industry: reducing microbial food safety hazards for sprouted seeds and guidance for industry: sampling and microbial testing of spent irrigation water during sprout production. Federal Register 1999;64:57893–902.
2. U.S. Food and Drug Administration. Irradiation in the production, processing and handling of food. Federal Register 2000;65:64605–7.
3. CDC. An atlas of *Salmonella* in the United States: serotype-specific surveillance, 1968–98. Atlanta, Georgia: U. S. Department of Health and Human Services, CDC, 2001.
4. CDC. Outbreaks of *Escherichia coli* O157:H7 infection associated with eating alfalfa sprouts—Michigan and Virginia. MMWR 1997;46:741–4.
5. National Advisory Committee on Microbiological Criteria for Food. Microbiological safety evaluations and recommendations on sprouted seeds. Int J Food Microbiol 1999;52:123–53.
6. Patterson JE, Woodburn MJ. *Klebsiella* and other bacteria on alfalfa and bean sprouts at the retail level. J Food Sci 1995;45:492–5.
7. Brooks JT, Samantha YR, Shillam P, et al. *Salmonella* Typhimurium infections transmitted by chlorine-pretreated clover sprout seeds. Am J Epidemiol 2001;154:1020–8.
8. U.S. Food and Drug Administration. 1999 consumer advisory. Available at http://www.cfsan.fda.gov/~lrd/hhssprts.html. Accessed January 2002.

Notice to Readers

Revision of *MMWR* Format and Contributor Attribution Policy

This issue marks the return of the *MMWR* to its original 8½" X 11" size and introduces a new font and additional color. These changes are intended to improve the readability of the publication and to better accommodate complex tables, figures, and photographs. Also effective with this issue, reports will include the name and affiliation of all contributors. In keeping with traditional *MMWR* practice, external contributors will be listed first followed by contributors from CDC. The revised policy also specifies the role and responsibilities of contributors to *MMWR*. The contributor attribution policy is available at http://www.cdc.gov/mmwr.

Notice to Readers

Changes in National Notifiable Diseases List and Data Presentation

This issue of *MMWR* incorporates modifications to Tables I, II, and III, Cases of Notifiable Diseases, United States. This year, the modifications add diseases designated nationally notifiable by the Council of State and Territorial Epidemiologists (CSTE), in conjunction with CDC, and standardize the data presentation rules. Table IV, Deaths in 122 U.S. Cities, is referenced as Table III. As of January 1, 2002, three diseases have been added to the list of nationally notifiable diseases (Table 1). Except where indicated, National Notifiable Diseases Surveillance System (NNDSS) data presented in the notifiable disease tables are transmitted to CDC through the National Electronic Telecommunications System for Surveillance (NETSS). Additional information about nationally notifiable diseases, NNDSS, NETSS, and CSTE is available at http://www.cdc.gov/epo/dphsi/phs.htm and http://www.cste.org/.

Modifications to Table I

Provisional incidence data for diseases with annual incidence of <300 cases in the United States or diseases that are designated as notifiable in <25 states are presented in Table I. An additional column has been added to Table I to display cumulative, year-to-date, disease case counts for the preceding year.

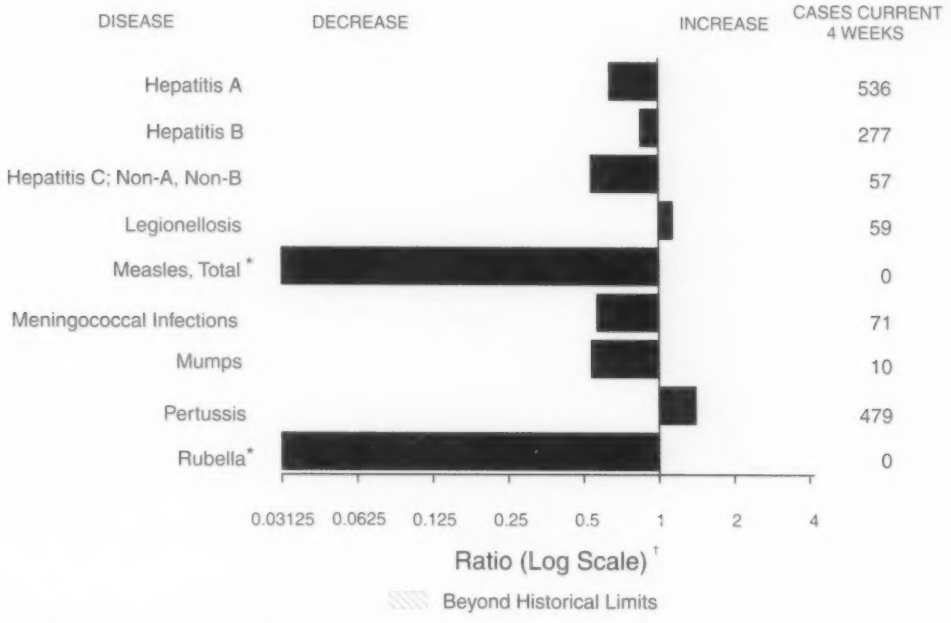
TABLE 1. Infectious diseases designated as notifiable at the national level — United States, 2002

- Acquired immunodeficiency syndrome (AIDS)
- Anthrax
- Botulism
  - foodborne
  - infant
  - other (wound and unspecified)
- Brucellosis
- Chancroid
- *Chlamydia trachomatis*, genital infections
- Cholera
- Coccidioidomycosis
- Cryptosporidiosis
- Cyclosporiasis
- Diphtheria
- Ehrlichiosis
  - human granulocytic
  - human monocytic
  - human, other or unspecified agent
- Encephalitis, Arboviral
  - California serogroup viral
  - Eastern equine
  - Powassan
  - St. Louis
  - Western equine
  - West Nile
- Enterohemorrhagic *Escherichia coli*
  - O157:H7
  - shiga toxin positive, serogroup non-O157
- Giardiasis
- Gonorrhea
- *Haemophilus influenzae*, invasive
- Hansen disease (leprosy)
- Hantavirus pulmonary syndrome
- Hemolytic uremic syndrome, postdiarrheal
- Hepatitis, viral, acute
- Hepatitis A, acute
- Hepatitis B, acute
- Hepatitis B virus, perinatal infection
- Hepatitis, C; non-A, non-B, acute
- HIV infection
  - adult (≥13 years)
  - pediatric (<13 years)
- Legionellosis
- Listeriosis
- Lyme disease
- Malaria
- Measles
- Meningococcal disease
- Mumps
- Pertussis
- Plague
- Poliomyelitis, paralytic
- Psittacosis
- Q fever
- Rabies
  - animal
  - human
- Rocky Mountain spotted fever
- Rubella
- Rubella, congenital syndrome
- Salmonellosis
- Shigellosis
- Streptococcal disease, invasive, Group A
- Streptococcal toxic-shock syndrome
- *Streptococcus pneumoniae*, drug resistant, invasive
- *Streptococcus pneumoniae*, invasive in children <5 years
- Syphilis
  - primary
  - secondary
  - latent
  - early latent
  - late latent
  - latent unknown duration
  - Neurosyphilis
  - late, non-neurologic
- Syphilis, congenital
  - Syphilitic stillbirth
- Tetanus
- Toxic-shock syndrome
- Trichinosis
- Tuberculosis
- Tularemia
- Typhoid fever
- Varicella (deaths only)
- Yellow fever

Modifications to Table II and Table III

Provisional incidence data for diseases with annual incidence of ≥300 cases in the United States and diseases that are designated as notifiable in ≥25 states are presented in Table II. For clarity of notifiable disease data presentation, if any distinct manifestation of a disease meets the Table II criteria, all distinct disease conditions related to Table II-eligible diseases will be included in Table II. Public Health Laboratory Information System (PHLIS) data for *Escherichia coli* O157:H7, salmonellosis, and shigellosis have been removed from Table II. Variable reporting criteria (e.g., case definitions) between NNDSS and PHLIS limit the meaningful comparison of these data. Vaccine-preventable diseases (VPDs) that are preventable through routine vaccination, have an annual incidence of >50 cases, and can be transmitted from human-to-human have been moved from Table III to Table II. VPDs that remain in Table I will be monitored yearly for changes in disease incidence. In addition, total incidence data for measles are published in Table II with a footnote specifying the total number of indigenous and imported cases.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending January 5, 2002, with historical data



* No measles or rubella cases were reported for the current 4-week period yielding a ratio for week 1 of zero (0).
† Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending January 5, 2002 (1st Week)

		Cum. 2002	Cum. 2001		Cum. 2002	Cum. 2001
Anthrax		-	-	Encephalitis: West Nile*	-	-
Botulism:	foodborne	1	1	Hansen disease (leprosy)*	-	-
	infant	1	-	Hantavirus pulmonary syndrome*	-	-
	other (wound & unspecified)	-	-	Hemolytic uremic syndrome, postdiarrheal*	2	2
Brucellosis*		-	-	HIV infection, pediatric*†	-	-
Chancroid		-	-	Plague	-	-
Cholera		-	-	Poliomyelitis, paralytic	-	-
Cyclosporiasis*		-	-	Psittacosis*	-	-
Diphtheria		-	-	Q fever*	-	-
Ehrlichiosis:	human granulocytic (HGE)*	-	2	Rabies, human	-	-
	human monocytic (HME)*	1	-	Streptococcal toxic-shock syndrome*	-	-
	other and unspecified	-	-	Tetanus	-	-
Encephalitis:	California serogroup viral*	1	-	Toxic-shock syndrome	1	5
	eastern equine*	-	-	Trichinosis	-	-
	Powassan*	-	-	Tularemia*	-	-
	St. Louis*	-	-	Yellow fever	-	-
	western equine*	-	-		-	-

-: No reported cases.
* Not notifiable in all states.
† Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update December 25, 2001.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending January 5, 2002, and January 6, 2001 (1st Week)

Reporting Area	AIDS		Chlamydia*		Cryptosporidiosis		*Escherichia coli* O157:H7		*Escherichia coli* Shiga Toxin Positive, Serogroup non-O157	
	Cum. 2002†	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	-	-	3,064	8,278	4	18	4	8	-	-
NEW ENGLAND	-	-	248	235	-	2	-	3	-	-
Maine	-	-	-	15	-	-	-	-	-	-
N.H.	-	-	-	12	-	-	-	-	-	-
Vt.	-	-	20	9	-	2	-	-	-	-
Mass.	-	-	191	61	-	-	-	3	-	-
R.I.	-	-	37	70	-	-	-	-	-	-
Conn.	-	-	-	68	-	-	-	-	-	-
MID. ATLANTIC	-	-	90	572	1	1	-	-	-	-
Upstate N.Y.	-	-	24	7	-	-	-	-	-	-
N.Y. City	-	-	66	202	-	1	-	-	-	-
N.J.	-	-	-	34	-	-	-	-	-	-
Pa.	-	-	-	329	1	-	N	N	-	-
E.N. CENTRAL	-	-	246	1,973	2	4	-	2	-	-
Ohio	-	-	46	729	1	-	-	-	-	-
Ind.	-	-	-	197	-	-	-	-	-	-
Ill.	-	-	168	563	-	-	-	1	-	-
Mich.	-	-	-	206	1	-	-	-	-	-
Wis.	-	-	32	278	-	4	-	1	-	-
W.N. CENTRAL	-	-	50	338	-	-	1	-	-	-
Minn.	-	-	1	134	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	1	-	-	-
Mo.	-	-	29	104	-	-	-	-	-	-
N. Dak.	-	-	-	1	-	-	-	-	-	-
S. Dak.	-	-	20	27	-	-	-	-	-	-
Nebr.	-	-	-	33	-	-	-	-	-	-
Kans.	-	-	-	39	-	-	-	-	-	-
S. ATLANTIC	-	-	705	1,125	-	2	-	1	-	-
Del.	-	-	-	41	-	-	-	-	-	-
Md.	-	-	148	215	-	1	-	-	-	-
D.C.	-	-	-	38	-	1	-	-	-	-
Va.	-	-	20	81	-	-	-	-	-	-
W. Va.	-	-	24	27	-	-	-	-	-	-
N.C.	-	-	144	253	-	-	-	-	-	-
S.C.	-	-	-	1	-	-	-	-	-	-
Ga.	-	-	-	203	-	-	-	1	-	-
Fla.	-	-	369	266	-	-	-	-	-	-
E.S. CENTRAL	-	-	317	466	-	1	-	1	-	-
Ky.	-	-	-	77	-	-	-	-	-	-
Tenn.	-	-	123	91	-	-	-	1	-	-
Ala.	-	-	194	171	-	-	-	-	-	-
Miss.	-	-	-	127	-	1	-	-	-	-
W.S. CENTRAL	-	-	1,041	1,556	-	-	-	1	-	-
Ark.	-	-	-	110	-	-	-	-	-	-
La.	-	-	163	315	-	-	-	-	-	-
Okla.	-	-	274	147	-	-	-	-	-	-
Tex.	-	-	604	984	-	-	-	1	-	-
MOUNTAIN	-	-	174	539	-	1	-	-	-	-
Mont.	-	-	-	13	-	-	-	-	-	-
Idaho	-	-	2	31	-	-	-	-	-	-
Wyo.	-	-	10	3	-	-	-	-	-	-
Colo.	-	-	-	291	-	1	-	-	-	-
N. Mex.	-	-	2	104	-	-	-	-	-	-
Ariz.	-	-	160	34	-	-	-	-	-	-
Utah	-	-	-	-	-	-	-	-	-	-
Nev.	-	-	-	63	-	-	-	-	-	-
PACIFIC	-	-	193	1,474	1	7	3	-	-	-
Wash.	-	-	-	204	-	U	-	-	-	-
Oreg.	-	-	-	33	1	-	2	-	-	-
Calif.	-	-	174	1,156	-	7	1	-	-	-
Alaska	-	-	19	6	-	-	-	-	-	-
Hawaii	-	-	-	75	-	-	-	-	-	-
Guam	-	-	-	-	-	-	N	N	-	-
P.R.	-	-	-	-	-	-	-	-	-	-
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

* Chlamydia refers to genital infections caused by *C. trachomatis*.

† Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update December 25, 2001.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending January 5, 2002, and January 6, 2001 (1st Week)

Reporting Area	*Escherichia coli* Shiga Toxin Positive, Not Serogrouped		Giardiasis	Gonorrhea		*Haemophilus influenzae*, Invasive			
						All Ages, All Serotypes		Age <5 years Serotype B	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	-	1	45	1,645	4,234	8	15	-	-
NEW ENGLAND	-	-	2	86	79	-	-	-	-
Maine	-	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	-	-
Vt.	-	-	1	2	2	-	-	-	-
Mass.	-	-	-	73	27	-	-	-	-
R.I.	-	-	-	11	19	-	-	-	-
Conn.	-	-	1	-	31	-	-	-	-
MID. ATLANTIC	-	-	4	28	368	2	5	-	-
Upstate N.Y.	-	-	1	5	4	1	-	-	-
N.Y. City	-	-	-	23	116	1	1	-	-
N.J.	-	-	-	-	66	-	4	-	-
Pa.	-	-	3	-	182	-	-	-	-
E.N. CENTRAL	-	-	16	145	963	4	4	-	-
Ohio	-	-	10	28	342	4	-	-	-
Ind.	-	-	-	-	105	-	-	-	-
Ill.	-	-	-	103	337	-	2	-	-
Mich.	-	-	6	-	67	-	1	-	-
Wis.	-	-	-	14	112	-	1	-	-
W.N. CENTRAL	-	-	6	20	198	-	-	-	-
Minn.	-	-	-	1	58	-	-	-	-
Iowa	-	-	6	-	-	-	-	-	-
Mo.	-	-	-	15	105	-	-	-	-
N. Dak.	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	4	5	-	-	-	-
Nebr.	-	-	-	-	8	-	-	-	-
Kans.	-	-	-	-	22	-	-	-	-
S. ATLANTIC	-	-	5	646	815	1	5	-	-
Del.	-	-	2	-	25	-	-	-	-
Md.	-	-	3	107	116	-	-	-	-
D.C.	-	-	-	-	27	-	-	-	-
Va.	-	-	-	118	82	-	-	-	-
W. Va.	-	-	-	12	3	-	-	-	-
N.C.	-	-	-	207	304	-	-	-	-
S.C.	-	-	-	-	-	-	-	-	-
Ga.	-	-	-	-	91	1	5	-	-
Fla.	-	-	-	202	167	-	-	-	-
E.S. CENTRAL	-	1	3	151	422	-	-	-	-
Ky.	-	1	-	-	45	-	-	-	-
Tenn.	-	-	-	68	76	-	-	-	-
Ala.	-	-	3	83	187	-	-	-	-
Miss.	-	-	-	-	114	-	-	-	-
W.S. CENTRAL	-	-	-	457	856	-	-	-	-
Ark.	-	-	-	-	86	-	-	-	-
La.	-	-	-	97	206	-	-	-	-
Okla.	-	-	-	101	77	-	-	-	-
Tex.	-	-	-	259	487	-	-	-	-
MOUNTAIN	-	-	2	57	173	-	1	-	-
Mont.	-	-	1	-	1	-	-	-	-
Idaho	-	-	-	-	2	-	-	-	-
Wyo.	-	-	-	-	-	-	-	-	-
Colo.	-	-	-	-	107	-	1	-	-
N. Mex.	-	-	1	-	24	-	-	-	-
Ariz.	-	-	-	57	10	-	-	-	-
Utah	-	-	-	-	-	-	-	-	-
Nev.	-	-	-	-	29	-	-	-	-
PACIFIC	-	-	7	55	360	1	-	-	-
Wash.	-	-	-	-	43	-	-	-	-
Oreg.	-	-	7	-	6	1	-	-	-
Calif.	-	-	-	50	298	-	-	-	-
Alaska	-	-	-	5	3	-	-	-	-
Hawaii	-	-	-	-	10	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	-
V.I.	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending January 5, 2002, and January 6, 2001 (1st Week)

Reporting Area	*Haemophilus influenzae*, Invasive				Hepatitis (Viral, Acute), by Type					
	Age <5 years									
	Non-Serotype B		Unknown Serotype		A		B		C; Non-A, Non-B	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	-	4	1	1	49	230	8	63	2	127
NEW ENGLAND	-	-	-	-	-	9	-	-	-	2
Maine	-	-	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	-	-	-
Vt.	-	-	-	-	-	-	-	-	-	-
Mass.	-	-	-	-	-	6	-	-	-	2
R.I.	-	-	-	-	-	-	-	-	-	-
Conn.	-	-	-	-	-	3	-	-	-	-
MID. ATLANTIC	-	1	-	-	-	21	-	23	-	57
Upstate N.Y.	-	-	-	-	-	-	-	-	-	-
N.Y. City	-	1	-	-	-	10	-	9	-	-
N.J.	-	-	-	-	-	10	-	12	-	57
Pa.	-	-	-	-	-	1	-	2	-	-
E.N. CENTRAL	-	-	-	-	6	114	5	6	-	10
Ohio	-	-	-	-	3	1	2	2	-	-
Ind.	-	-	-	-	-	-	-	-	-	-
Ill.	-	-	-	-	-	96	-	-	-	8
Mich.	-	-	-	-	3	16	3	4	-	2
Wis.	-	-	-	-	-	1	-	-	-	-
W.N. CENTRAL	-	-	-	-	4	6	-	7	-	38
Minn.	-	-	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	4	-	-	-	-	-
Mo.	-	-	-	-	-	3	-	6	-	38
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	-	1	-	-
Nebr.	-	-	-	-	-	1	-	-	-	-
Kans.	-	-	-	-	-	2	-	-	-	-
S. ATLANTIC	-	2	-	-	27	3	2	5	1	-
Del.	-	-	-	-	-	-	-	-	1	-
Md.	-	-	-	-	6	2	1	2	-	-
D.C.	-	-	-	-	-	1	1	-	-	-
Va.	-	-	-	-	-	-	-	-	-	-
W. Va.	-	-	-	-	-	-	-	-	-	-
N.C.	-	-	-	-	10	-	-	3	-	-
S.C.	-	-	-	-	-	-	-	-	-	-
Ga.	-	2	-	-	11	-	-	-	-	-
Fla.	-	-	-	-	-	-	-	-	-	-
E.S. CENTRAL	-	-	-	-	-	2	-	1	-	2
Ky.	-	-	-	-	-	1	-	-	-	-
Tenn.	-	-	-	-	-	1	-	-	-	-
Ala.	-	-	-	-	-	-	-	-	-	-
Miss.	-	-	-	-	-	-	-	1	-	2
W.S. CENTRAL	-	-	-	-	-	41	-	3	-	18
Ark.	-	-	-	-	-	-	-	-	-	-
La.	-	-	-	-	-	1	-	3	-	5
Okla.	-	-	-	-	-	-	-	-	-	-
Tex.	-	-	-	-	-	40	-	-	-	13
MOUNTAIN	-	1	1	1	1	9	-	2	-	-
Mont.	-	-	-	-	-	2	-	-	-	-
Idaho	-	-	-	-	-	1	-	1	-	-
Wyo.	-	-	-	-	-	-	-	-	-	-
Colo.	-	-	-	-	-	5	-	1	-	-
N. Mex.	-	1	1	1	1	1	-	-	-	-
Ariz.	-	-	-	-	-	-	-	-	-	-
Utah	-	-	-	-	-	-	-	-	-	-
Nev.	-	-	-	-	-	-	-	-	-	-
PACIFIC	-	-	-	-	11	25	1	16	1	-
Wash.	-	-	-	-	-	-	-	-	-	-
Oreg.	-	-	-	-	4	-	1	-	1	-
Calif.	-	-	-	-	7	24	-	15	-	-
Alaska	-	-	-	-	-	1	-	1	-	-
Hawaii	-	-	-	-	-	-	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	-	-
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending January 5, 2002, and January 6, 2001 (1st Week)

Reporting Area	Legionellosis		Listeriosis		Lyme Disease		Malaria		Measles Total	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	2	8	-	6	28	31	4	13	-	-
NEW ENGLAND	-	-	-	2	-	2	-	1	-	-
Maine	-	-	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	-	-	-
Vt.	-	-	-	-	-	-	-	-	-	-
Mass.	-	-	-	2	-	2	-	1	-	-
R.I.	-	-	-	-	-	-	-	-	-	-
Conn.	-	-	-	-	-	-	-	-	-	-
MID. ATLANTIC	-	2	-	-	8	10	-	3	-	-
Upstate N.Y.	-	-	-	-	8	-	-	-	-	-
N.Y. City	-	-	-	-	-	-	-	3	-	-
N.J.	-	2	-	-	-	10	-	-	-	-
Pa.	-	-	-	-	-	-	-	-	-	-
E.N. CENTRAL	1	5	-	-	1	5	-	2	-	-
Ohio	-	4	-	-	1	-	-	1	-	-
Ind.	-	-	-	-	-	-	-	-	-	-
Ill.	-	1	-	-	-	2	-	1	-	-
Mich.	1	-	-	-	-	-	-	-	-	-
Wis.	-	-	-	-	U	3	-	-	-	-
W.N. CENTRAL	-	-	-	1	-	-	1	-	-	-
Minn.	-	-	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	1	-	-	-
Mo.	-	-	-	-	-	-	-	-	-	-
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	-	-	-	-
Nebr.	-	-	-	-	-	-	-	-	-	-
Kans.	-	-	-	1	-	-	-	-	-	-
S. ATLANTIC	1	-	-	-	19	10	2	1	-	-
Del.	-	-	-	-	-	1	-	-	-	-
Md.	1	-	-	-	19	8	1	1	-	-
D.C.	-	-	-	-	-	1	-	-	-	-
Va.	-	-	-	-	-	-	-	-	-	-
W. Va.	N	N	-	-	-	-	-	-	-	-
N.C.	-	-	-	-	-	-	1	-	-	-
S.C.	-	-	-	-	-	-	-	-	-	-
Ga.	-	-	-	-	-	-	-	-	-	-
Fla.	-	-	-	-	-	-	-	-	-	-
E.S. CENTRAL	-	-	-	-	-	-	-	-	-	-
Ky.	-	-	-	-	-	-	-	-	-	-
Tenn.	-	-	-	-	-	-	-	-	-	-
Ala.	-	-	-	-	-	-	-	-	-	-
Miss.	-	-	-	-	-	-	-	-	-	-
W.S. CENTRAL	-	-	-	-	-	2	-	-	-	-
Ark.	-	-	-	-	-	-	-	-	-	-
La.	-	-	-	-	-	-	-	-	-	-
Okla.	-	-	-	-	-	-	-	-	-	-
Tex.	-	-	-	-	-	2	-	-	-	-
MOUNTAIN	-	-	-	-	-	-	-	-	-	-
Mont.	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	-
Wyo.	-	-	-	-	-	-	-	-	-	-
Colo.	-	-	-	-	-	-	-	-	-	-
N. Mex.	-	-	-	-	-	-	-	-	-	-
Ariz.	-	-	-	-	-	-	-	-	-	-
Utah	-	-	-	-	-	-	-	-	-	-
Nev.	-	-	-	-	-	-	-	-	-	-
PACIFIC	-	1	-	3	-	2	1	6	-	-
Wash.	-	-	-	-	-	-	-	-	-	-
Oreg.	N	N	-	-	-	-	-	1	-	-
Calif.	-	1	-	3	-	2	1	5	-	-
Alaska	-	-	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	N	N	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	N	N	-	-	-	-
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending January 5, 2002, and January 6, 2001 (1st Week)

Reporting Area	Meningococcal Disease		Mumps		Pertussis		Rabies, Animal	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	9	32	1	3	12	53	8	143
NEW ENGLAND	1	4	-	-	4	21	-	5
Maine	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	-
Vt.	1	-	-	-	4	6	-	3
Mass.	-	4	-	-	-	15	-	2
R.I.	-	-	-	-	-	-	-	-
Conn.	-	-	-	-	-	-	-	-
MID. ATLANTIC	-	6	-	-	-	-	8	7
Upstate N.Y.	-	1	-	-	-	-	8	6
N.Y. City	-	3	-	-	-	-	-	-
N.J.	-	2	-	-	-	-	-	1
Pa.	-	-	-	-	-	-	-	-
E.N. CENTRAL	6	7	-	-	3	9	-	1
Ohio	6	1	-	-	3	2	-	-
Ind.	-	-	-	-	-	-	-	-
Ill.	-	2	-	-	-	-	-	-
Mich.	-	2	-	-	-	2	-	-
Wis.	-	2	-	-	-	5	-	1
W.N. CENTRAL	1	1	-	-	1	2	-	4
Minn.	-	-	-	-	-	-	-	2
Iowa	-	-	-	-	1	-	-	1
Mo.	-	1	-	-	-	1	-	1
N. Dak.	-	-	-	-	-	-	-	-
S. Dak.	1	-	-	-	-	-	-	-
Nebr.	-	-	-	-	-	-	-	-
Kans.	-	-	-	-	-	1	-	-
S. ATLANTIC	1	2	-	-	1	-	-	1
Del.	-	-	-	-	1	-	-	-
Md.	-	2	-	-	-	-	-	-
D.C.	-	-	-	-	-	-	-	-
Va.	-	-	-	-	-	-	-	-
W. Va.	-	-	-	-	-	-	-	1
N.C.	1	-	-	-	-	-	-	-
S.C.	-	-	-	-	-	-	-	-
Ga.	-	-	-	-	-	-	-	-
Fla.	-	-	-	-	-	-	-	-
E.S. CENTRAL	-	1	-	-	-	-	-	106
Ky.	-	-	-	-	-	-	-	-
Tenn.	-	-	-	-	-	-	-	106
Ala.	-	1	-	-	-	-	-	-
Miss.	-	-	-	-	-	-	-	-
W.S. CENTRAL	-	4	-	-	-	-	-	9
Ark.	-	-	-	-	-	-	-	-
La.	-	1	-	-	-	-	-	-
Okla.	-	-	-	-	-	-	-	1
Tex.	-	3	-	-	-	-	-	8
MOUNTAIN	-	1	-	-	2	8	-	6
Mont.	-	-	-	-	-	-	-	-
Idaho	-	1	-	-	-	1	-	-
Wyo.	-	-	-	-	-	-	-	2
Colo.	-	-	-	-	-	7	-	-
N. Mex.	-	-	-	-	2	-	-	-
Ariz.	-	-	-	-	-	-	-	4
Utah	-	-	-	-	-	-	-	-
Nev.	-	-	-	-	-	-	-	-
PACIFIC	-	6	1	3	1	13	-	4
Wash.	-	-	-	-	-	-	-	-
Oreg.	-	1	N	N	-	-	-	-
Calif.	-	5	1	2	-	10	-	2
Alaska	-	-	-	-	1	-	-	2
Hawaii	-	-	-	1	-	3	-	-
Guam	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	1
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending January 5, 2002, and January 6, 2001 (1st Week)

Reporting Area	Rocky Mountain spotted fever		Rubella				Salmonellosis	
			Rubella		Congenital Rubella			
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	7	1	-	-	-	-	77	339
NEW ENGLAND	-	-	-	-	-	-	-	22
Maine	-	-	-	-	-	-	-	2
N.H.	-	-	-	-	-	-	-	-
Vt.	-	-	-	-	-	-	-	-
Mass.	-	-	-	-	-	-	-	20
R.I.	-	-	-	-	-	-	-	-
Conn.	-	-	-	-	-	-	-	-
MID. ATLANTIC	1	-	-	-	-	-	3	53
Upstate N.Y.	-	-	-	-	-	-	-	3
N.Y. City	-	-	-	-	-	-	-	9
N.J.	-	-	-	-	-	-	-	30
Pa.	1	-	-	-	-	-	3	11
E.N. CENTRAL	-	1	-	-	-	-	21	53
Ohio	-	-	-	-	-	-	15	11
Ind.	-	-	-	-	-	-	-	-
Ill.	-	1	-	-	-	-	1	24
Mich.	-	-	-	-	-	-	5	4
Wis.	-	-	-	-	-	-	-	14
W.N. CENTRAL	-	-	-	-	-	-	6	14
Minn.	-	-	-	-	-	-	2	4
Iowa	-	-	-	-	-	-	4	-
Mo.	-	-	-	-	-	-	-	5
N. Dak.	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	-	3
Nebr.	-	-	-	-	-	-	-	1
Kans.	-	-	-	-	-	-	-	1
S. ATLANTIC	6	-	-	-	-	-	29	76
Del.	-	-	-	-	-	-	-	-
Md.	1	-	-	-	-	-	4	5
D.C.	-	-	-	-	-	-	-	-
Va.	-	-	-	-	-	-	-	-
W. Va.	-	-	-	-	-	-	-	-
N.C.	5	-	-	-	-	-	21	8
S.C.	-	-	-	-	-	-	-	-
Ga.	-	-	-	-	-	-	4	62
Fla.	-	-	-	-	-	-	-	1
E.S. CENTRAL	-	-	-	-	-	-	9	17
Ky.	-	-	-	-	-	-	-	-
Tenn.	-	-	-	-	-	-	-	1
Ala.	-	-	-	-	-	-	9	8
Miss.	-	-	-	-	-	-	-	8
W.S. CENTRAL	-	-	-	-	-	-	-	40
Ark.	-	-	-	-	-	-	-	-
La.	-	-	-	-	-	-	-	6
Okla.	-	-	-	-	-	-	-	-
Tex.	-	-	-	-	-	-	-	34
MOUNTAIN	-	-	-	-	-	-	-	15
Mont.	-	-	-	-	-	-	-	1
Idaho	-	-	-	-	-	-	-	2
Wyo.	-	-	-	-	-	-	-	-
Colo.	-	-	-	-	-	-	-	7
N. Mex.	-	-	-	-	-	-	-	5
Ariz.	-	-	-	-	-	-	-	-
Utah	-	-	-	-	-	-	-	-
Nev.	-	-	-	-	-	-	-	-
PACIFIC	-	-	-	-	-	-	9	49
Wash.	-	-	-	-	-	-	-	-
Oreg.	-	-	-	-	-	-	3	-
Calif.	-	-	-	-	-	-	6	47
Alaska	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-	2
Guam	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending January 5, 2002, and January 6, 2001 (1st Week)

Reporting Area	Shigellosis		Streptococcal Disease, Invasive, Group A		*Streptococcus pneumoniae*, Invasive (<5 years)		*Streptococcus pneumoniae*, Drug Resistant, Invasive	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	2001
UNITED STATES	45	166	17	55	1	-	-	7
NEW ENGLAND	-	2	1	2	1	-	-	-
Maine	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	-
Vt.	-	-	1	-	1	-	-	-
Mass.	-	2	-	2	-	-	-	-
R.I.	-	-	-	-	-	-	-	-
Conn.	-	-	-	-	-	-	-	-
MID. ATLANTIC	-	13	1	12	-	-	-	-
Upstate N.Y.	-	5	1	1	-	-	-	-
N.Y. City	-	7	-	9	-	-	-	-
N.J.	-	-	-	2	-	-	-	-
Pa.	-	1	-	-	-	-	-	-
E.N. CENTRAL	2	19	3	18	-	-	-	-
Ohio	2	4	3	1	-	-	-	-
Ind.	-	-	-	-	-	-	-	-
Ill.	-	7	-	5	-	-	-	-
Mich.	-	8	-	10	-	-	-	-
Wis.	-	-	-	2	-	-	-	-
W.N. CENTRAL	11	21	-	5	-	-	-	-
Minn.	1	11	-	-	-	-	-	-
Iowa	4	-	-	-	-	-	-	-
Mo.	-	6	-	2	-	-	-	-
N. Dak.	-	-	-	-	-	-	-	-
S. Dak.	6	-	-	1	-	-	-	-
Nebr.	-	1	-	-	-	-	-	-
Kans.	-	3	-	2	-	-	-	-
S. ATLANTIC	20	24	7	-	-	-	-	1
Del.	-	-	-	-	-	-	-	-
Md.	-	2	2	-	-	-	-	-
D.C.	1	-	-	-	-	-	-	-
Va.	-	-	-	-	-	-	-	-
W. Va.	-	-	-	-	-	-	-	-
N.C.	7	10	5	-	-	-	-	-
S.C.	-	-	-	-	-	-	-	-
Ga.	12	12	-	-	-	-	-	-
Fla.	-	-	-	-	-	-	-	1
E.S. CENTRAL	5	15	-	-	-	-	-	-
Ky.	-	3	-	-	-	-	-	-
Tenn.	-	-	-	-	-	-	-	-
Ala.	5	6	-	-	-	-	-	-
Miss.	-	6	-	-	-	-	-	-
W.S. CENTRAL	-	37	-	6	-	-	-	5
Ark.	-	-	-	-	-	-	-	-
La.	-	2	-	-	-	-	-	5
Okla.	-	-	-	-	-	-	-	-
Tex.	-	35	-	6	-	-	-	-
MOUNTAIN	-	7	3	10	-	-	-	1
Mont.	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-
Wyo.	-	-	-	-	-	-	-	-
Colo.	-	3	-	8	-	-	-	-
N. Mex.	-	4	3	2	-	-	-	1
Ariz.	-	-	-	-	-	-	-	-
Utah	-	-	-	-	-	-	-	-
Nev.	-	-	-	-	-	-	-	-
PACIFIC	7	28	2	2	-	-	-	-
Wash.	-	-	-	-	-	-	-	-
Oreg.	-	-	-	-	-	-	-	-
Calif.	7	28	2	2	-	-	-	-
Alaska	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-
Guam	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	-	-
C.N.M.I.	-	U	-	U	-	U	-	-

N: Not notifiable. U: Unavailable. - : No reported cases.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending January 5, 2002, and January 6, 2001 (1st Week)

Reporting Area	Syphilis (Primary & Secondary) Cum. 2002	Syphilis (Primary & Secondary) Cum. 2001	Syphilis Congenital* Cum. 2002	Syphilis Congenital* Cum. 2001	Tuberculosis Cum. 2002	Tuberculosis Cum. 2001	Typhoid fever Cum. 2002	Typhoid fever Cum. 2001
UNITED STATES	35	62	-	7	2	62	-	2
NEW ENGLAND	-	1	-	-	-	-	-	-
Maine	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	-
Vt.	-	-	-	-	-	-	-	-
Mass.	-	-	-	-	-	-	-	-
R.I.	-	-	-	-	-	-	-	-
Conn.	-	1	-	-	-	-	-	-
MID. ATLANTIC	-	6	-	-	1	-	-	-
Upstate N.Y.	-	-	-	-	-	-	-	-
N.Y. City	-	3	-	-	-	-	-	-
N.J.	-	2	-	-	-	-	-	-
Pa.	-	1	-	-	1	-	-	-
E.N. CENTRAL	1	6	-	-	1	1	-	-
Ohio	1	-	-	-	-	1	-	-
Ind.	-	2	-	-	-	-	-	-
Ill.	-	4	-	-	1	-	-	-
Mich.	-	-	-	-	-	-	-	-
Wis.	-	-	-	-	-	-	-	-
W.N. CENTRAL	-	1	-	-	-	-	-	1
Minn.	-	1	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	-	-
Mo.	-	-	-	-	-	-	-	1
N. Dak.	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	-	-
Nebr.	-	-	-	-	-	-	-	-
Kans.	-	-	-	-	-	-	-	-
S. ATLANTIC	14	24	-	5	-	3	-	-
Del.	-	-	-	-	-	-	-	-
Md.	-	2	-	-	-	2	-	-
D.C.	-	-	-	-	-	-	-	-
Va.	1	1	-	-	-	-	-	-
W. Va.	-	-	-	-	-	-	-	-
N.C.	10	8	-	-	-	-	-	-
S.C.	-	1	-	1	-	-	-	-
Ga.	-	5	-	2	-	1	-	-
Fla.	3	7	-	2	-	-	-	-
E.S. CENTRAL	3	11	-	-	-	-	-	-
Ky.	-	-	-	-	-	-	-	-
Tenn.	1	4	-	-	-	-	-	-
Ala.	2	3	-	-	-	-	-	-
Miss.	-	4	-	-	-	-	-	-
W.S. CENTRAL	6	6	-	1	-	30	-	-
Ark.	-	1	-	1	-	3	-	-
La.	2	1	-	-	-	-	-	-
Okla.	1	-	-	-	-	-	-	-
Tex.	3	4	-	-	-	27	-	-
MOUNTAIN	9	-	-	-	-	2	-	-
Mont.	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-
Wyo.	-	-	-	-	-	-	-	-
Colo.	-	-	-	-	-	-	-	-
N. Mex.	-	-	-	-	-	2	-	-
Ariz.	9	-	-	-	-	-	-	-
Utah	-	-	-	-	-	-	-	-
Nev.	-	-	-	-	-	-	-	-
PACIFIC	2	7	-	1	-	26	-	1
Wash.	-	2	-	-	-	5	-	-
Oreg.	-	-	-	-	-	-	-	-
Calif.	2	5	-	1	-	16	-	1
Alaska	-	-	-	-	-	1	-	-
Hawaii	-	-	-	-	-	4	-	-
Guam	-	-	-	-	-	-	-	-
P.R.	-	20	-	-	-	-	-	-
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
*Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE III. Deaths in 122 U.S. cities,* week ending January 5, 2002 (1st Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	418	316	60	30	10	2	38
Boston, Mass.	U	U	U	U	U	U	U
Bridgeport, Conn.	55	41	7	6	1	-	2
Cambridge, Mass.	26	25	1	-	-	-	3
Fall River, Mass.	30	26	4	-	-	-	3
Hartford, Conn.	32	21	5	2	2	2	3
Lowell, Mass.	28	23	4	1	-	-	3
Lynn, Mass.	15	11	2	1	1	-	1
New Bedford, Mass.	36	31	3	1	1	-	4
New Haven, Conn.	55	31	11	10	3	-	4
Providence, R.I.	U	U	U	U	U	U	U
Somerville, Mass.	3	3	-	-	-	-	-
Springfield, Mass.	43	30	7	5	1	-	6
Waterbury, Conn.	33	23	8	1	1	-	1
Worcester, Mass.	62	51	8	3	-	-	8
MID. ATLANTIC	2,188	1,519	426	158	46	39	112
Albany, N.Y.	57	38	12	2	2	3	6
Allentown, Pa.	26	24	2	-	-	-	2
Buffalo, N.Y.	178	126	36	6	3	7	14
Camden, N.J.	40	29	6	3	-	2	4
Elizabeth, N.J.	26	21	4	1	-	-	-
Erie, Pa.§	54	44	7	3	-	-	5
Jersey City, N.J.	51	35	12	3	1	-	-
New York City, N.Y.	1,260	846	259	109	29	17	47
Newark, N.J.	U	U	U	U	U	U	U
Paterson, N.J.	20	13	-	4	1	2	5
Philadelphia, Pa.	233	155	48	18	8	4	12
Pittsburgh, Pa.§	37	27	9	-	-	1	1
Reading, Pa.	30	26	3	-	1	-	3
Rochester, N.Y.	U	U	U	U	U	U	U
Schenectady, N.Y.	21	19	2	-	-	-	1
Scranton, Pa.§	41	31	5	4	-	1	2
Syracuse, N.Y.	64	48	12	2	1	1	6
Trenton, N.J.	31	22	6	2	-	1	1
Utica, N.Y.	19	15	3	1	-	-	3
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	1,435	1,021	281	78	21	34	97
Akron, Ohio	51	23	21	2	-	5	6
Canton, Ohio	39	27	10	2	-	-	2
Chicago, Ill.	U	U	U	U	U	U	U
Cincinnati, Ohio	91	58	20	5	3	5	6
Cleveland, Ohio	113	78	25	5	3	2	8
Columbus, Ohio	144	100	31	8	2	3	11
Dayton, Ohio	140	110	19	9	-	2	8
Detroit, Mich.	178	117	39	15	2	5	12
Evansville, Ind.	29	26	2	-	1	-	4
Fort Wayne, Ind.	51	41	8	2	-	-	2
Gary, Ind.	28	19	7	2	-	-	3
Grand Rapids, Mich.	43	31	6	2	1	3	5
Indianapolis, Ind.	133	99	19	12	2	1	11
Lansing, Mich.	28	21	5	1	-	1	3
Milwaukee, Wis.	96	73	18	2	2	1	5
Peoria, Ill.	52	41	8	2	-	1	3
Rockford, Ill.	54	39	13	1	-	1	3
South Bend, Ind.	52	37	6	3	3	3	-
Toledo, Ohio	63	42	16	3	1	1	4
Youngstown, Ohio	50	39	8	2	1	-	1
W.N. CENTRAL	677	499	113	41	15	9	53
Des Moines, Iowa	132	101	20	9	1	1	13
Duluth, Minn.	25	19	5	1	-	-	3
Kansas City, Kans.	33	20	11	2	-	-	5
Kansas City, Mo.	56	37	14	1	4	-	5
Lincoln, Nebr.	33	25	6	2	-	-	3
Minneapolis, Minn.	121	94	15	6	3	3	12
Omaha, Nebr.	68	52	10	6	-	-	1
St. Louis, Mo.	73	52	8	6	4	3	-
St. Paul, Minn.	43	35	6	2	-	-	4
Wichita, Kans.	93	64	18	6	3	2	7
S. ATLANTIC	999	620	232	89	36	21	68
Atlanta, Ga.	95	55	25	11	2	2	4
Baltimore, Md.	175	100	39	20	12	4	14
Charlotte, N.C.	76	48	17	6	1	3	7
Jacksonville, Fla.	141	92	29	14	5	1	12
Miami, Fla.	70	39	20	3	6	2	8
Norfolk, Va.	37	18	17	2	-	-	3
Richmond, Va.	49	30	8	7	2	2	2
Savannah, Ga.	54	42	9	2	-	1	1
St. Petersburg, Fla.	57	43	10	4	-	-	4
Tampa, Fla.	145	103	27	8	4	3	11
Washington, D.C.	100	50	31	12	4	3	2
Wilmington, Del.	U	U	U	U	U	U	U
E.S. CENTRAL	554	381	116	41	10	6	38
Birmingham, Ala.	140	101	19	11	5	4	13
Chattanooga, Tenn.	84	59	18	7	-	-	10
Knoxville, Tenn.	64	46	15	2	1	-	-
Lexington, Ky.	46	24	15	6	1	-	3
Memphis, Tenn.	125	85	26	11	1	2	7
Mobile, Ala.	54	37	15	1	1	-	3
Montgomery, Ala.	41	29	8	3	1	-	2
Nashville, Tenn.	U	U	U	U	U	U	U
W.S. CENTRAL	1,139	716	244	107	49	23	70
Austin, Tex.	99	71	18	7	3	-	12
Baton Rouge, La.	11	5	3	2	-	1	1
Corpus Christi, Tex.	35	27	5	3	-	-	1
Dallas, Tex.	165	79	45	23	15	3	10
El Paso, Tex.	62	45	13	2	1	1	-
Ft. Worth, Tex.	74	52	13	4	4	1	1
Houston, Tex.	335	196	70	44	19	6	22
Little Rock, Ark.	U	U	U	U	U	U	U
New Orleans, La.	U	U	U	U	U	U	U
San Antonio, Tex.	198	124	47	14	6	7	8
Shreveport, La.	52	34	11	4	-	3	3
Tulsa, Okla.	108	83	19	4	1	1	12
MOUNTAIN	929	622	197	65	31	13	58
Albuquerque, N.M.	119	86	26	4	2	1	4
Boise, Idaho	31	22	6	-	3	-	2
Colo. Springs, Colo.	68	51	10	5	1	1	2
Denver, Colo.	101	64	21	4	6	6	6
Las Vegas, Nev.	207	132	54	17	3	1	10
Ogden, Utah	45	35	4	5	1	-	6
Phoenix, Ariz.	94	48	25	11	5	4	4
Pueblo, Colo.	25	16	5	4	-	-	5
Salt Lake City, Utah	101	70	17	8	6	-	11
Tucson, Ariz.	138	98	29	7	4	-	8
PACIFIC	1,287	949	220	73	28	17	117
Berkeley, Calif.	14	8	5	1	-	-	-
Fresno, Calif.	55	38	11	3	3	-	7
Glendale, Calif.	17	13	4	-	-	-	3
Honolulu, Hawaii	75	57	15	2	-	1	12
Long Beach, Calif.	51	44	4	1	2	-	5
Los Angeles, Calif.	183	119	37	21	3	3	5
Pasadena, Calif.	35	29	1	3	2	-	9
Portland, Oreg.	U	U	U	U	U	U	U
Sacramento, Calif.	205	159	28	12	4	2	24
San Diego, Calif.	159	118	26	9	5	1	10
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	164	118	34	4	3	5	19
Santa Cruz, Calif.	36	26	2	6	2	-	5
Seattle, Wash.	123	92	24	4	2	1	11
Spokane, Wash.	55	45	7	1	1	1	5
Tacoma, Wash.	115	83	22	6	1	3	2
TOTAL	9,626¶	6,643	1,889	682	246	164	651

U: Unavailable. -:No reported cases.

* Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

† Pneumonia and influenza.

§ Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶ Total includes unknown ages.

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